

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1427

Effective July 1, 2011

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **September 2012**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

**Heritage Sterling Wood Double Hung Window with Double Hung Studio, Non-impact Resistant,**  
manufactured by

**Kolbe & Kolbe Millwork Co., Inc.**  
**1323 South Eleventh Avenue**  
**Wausau, WI 54401**  
**(715) 842 - 5666**

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The Heritage Sterling wood double hung window with a double hung studio evaluated in this report is a non-impact resistant wood window assembly. The wood double hung window with a double hung studio specified in this report is based on the following tested construction:

### General Description:

System	Description	Rating	Hallmark Certification
1	Heritage Sterling Wood Double Hung with Double Hung Studio	H-LC60 123 x 80 LC-PG60 123x80 - H	413-H-1019.00 413-H-1019.01

**Product Dimensions: Overall Size:** 123" x 80  $\frac{7}{16}$ "

### Double Hung Windows:

Double Hung Size	Top Sash Size	Bottom Sash Size	Glass Size (Both Sashes)
45 $\frac{1}{2}$ " x 80 $\frac{7}{16}$ "	42 $\frac{7}{32}$ " x 38 $\frac{23}{32}$ "	42 $\frac{7}{32}$ " x 39 $\frac{15}{16}$ "	40" x 36"

### Studio:

Studio Size	Studio Sash Size	Studio Glass Size
77 $\frac{1}{2}$ " x 80 $\frac{7}{16}$ "	75 $\frac{15}{16}$ " x 78"	72 $\frac{1}{2}$ " x 73 $\frac{1}{4}$ "

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**Glazing Description:**

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	Double Hung: IG-1 Double Hung Studio: IG-2	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: Sealed insulating glass units. The sealed insulating glass unit are comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a desiccant-filled stainless steel spacer system. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-2: Sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ( $\frac{5}{32}$ " ) heat strengthened glass lites separated by a desiccant-filled stainless steel spacer system. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

**Glazing Method Key:**

GM-1: The glass is set from the interior against structural silicone backbedding. Along the interior, wood glazing stops are secured with brads spaced 2 inches from the ends and 5-6 inches on center.

**Frame Construction (Double Hung and Studio):** The frame members consist of molded pine. The corners are rabbeted, butted, sealed with silicone, and secured with staples. The brickmould is secured to the head and jambs with brads located 3 inches from each end and 10 inches on center. The brickmould is mitered and secured with two screws at each corner. The sill nosing is secured to the brickmould with one screw per corner and to the sill frame with glue and T-nails spaced 3 inches from each end and 8-10 inches on center. Interior wood stops are secured at the head and side jambs with staples spaced 2 inches from each end and 8-10 inches on center.

**Double Hung Sash Construction:** The sash members consist of molded pine sections. The corners are mortise and tenon construction and are secured with brads.

**Studio Sash Construction:** The fixed sash members consist of molded pine sections. The corners are mortise and tenon construction and are secured with screws.

**Vertical Mullions:** The combination mull consists of the side jamb of the double hung and the side jamb of the studio window sealed and secured together with one row of No. 8 x  $1\frac{1}{4}$ " screws through the double hung frame into the studio frame spaced 12 inches on center. Two corrugated nails are fastened at the mull end and spaced along the exterior 8-10 inches on center.

**Hardware:**

- Vinyl jamb liner with sash balance; Two (2) required; Located at the side jambs.
- Hardware channel with interlock and angle; One (1) required; Located at the meeting rails.
- Metal pivot pins; Four (4) required; Located at the bottom corners of each sash
- Tilt latches; Two (2) required; Located at each end of the top rail of the top sash.

**Product Identification:** A certification program label (WDMA Hallmark Certified) will be affixed to the window. The certification program label includes the manufacturer's name; product name; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05 and AAMA/WDMA/CSA 101/I.S.2/A440-08.

## LIMITATIONS

### Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	123	80 $\frac{7}{16}$	$\pm 60$

**Impact Resistance:** These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

**Acceptance of Smaller Assemblies:** Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

## INSTALLATION INSTRUCTIONS

**General:** The window assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation drawings are available from the manufacturer.

**Installation:** The windows shall be fastened to minimum Southern Yellow Pine dimensional lumber. All fasteners shall be long enough to penetrate a minimum of 1  $\frac{1}{2}$  inches into the wall framing.

**Option 1:** The double hung studio and double hung windows are secured to the wall framing using Kolbe & Kolbe metal installation clips (1  $\frac{5}{8}$ " x 10  $\frac{1}{16}$ " x 0.04"). The clips are secured to the window frame with two (2) No. 8 x  $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1  $\frac{3}{4}$ " screw. **Studio:** The clips are spaced 11  $\frac{1}{2}$  inches from each corner and on center along the studio side jambs and 12  $\frac{15}{16}$  inches from each corner and on center on the head and sill. **Double Hung:** The clips are spaced 11  $\frac{1}{2}$  inches from each corner and on center along the side jambs. Along the head, the clips are spaced 15  $\frac{3}{16}$  inches from the corners and on center.

**Option 2:** The double hung studio and double hung windows are secured to the wall framing using minimum No. 10 screws. **Studio:** The fasteners shall be located 8  $\frac{5}{8}$  inches from each corner and on center along the side jambs. Along the head and sill the fasteners shall be located 8  $\frac{15}{16}$  inches from each corner and on center. **Double hung:** The fasteners shall be located 8  $\frac{15}{16}$  inches from each corner and on center on the side jamb. Along the head, the fasteners are spaced 15  $\frac{3}{16}$  inches from the corners and on center.

**Mullion Attachment (Both Options):** Two Gemini installation clips are attached at each end of the mullion. (A Gemini clip is two installation clips installed reversed.) The Gemini clips are attached to the mullions using two (2) No. 8 x 2  $\frac{1}{4}$ " screws that go through the clip into the mullion. The clips are attached to the wall framing with two (2) No. 8 screws.

**Brickmould attachment (both options):** The brickmould is attached to the wall framing using 2" coated T-nails spaced 24 inches on center.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.